

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371		ATTORNEY'S DOCKET NUMBER 59441(11259)
		U.S. APPLICATION NO. (if known, see 37 CFR 1.5) 10/562086
INTERNATIONAL APPLICATION NO. PCT/US2004/021637	INTERNATIONAL FILING DATE 6 July 2004	PRIORITY DATE CLAIMED 6 July 2003
TITLE OF INVENTION METHODS OF PRODUCING DIFFERENTIATED HEMATOPOIETIC CELLS FOR TREATMENT OF CYTOPENIA		
APPLICANT(S) FOR DO/EO/US Peter J. Quesenberry		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
1. <input checked="" type="checkbox"/> This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. 2. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. 3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. 4. <input type="checkbox"/> The US has been elected (Article 31). 5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371 (c)(2)) a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau). b. <input checked="" type="checkbox"/> has been communicated by the International Bureau. c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). 6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). a. <input type="checkbox"/> is attached hereto. b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4). 7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> have been communicated by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input type="checkbox"/> have not been made and will not be made. 8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). Items 11 to 20 below concern document(s) or information included: 11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. <input checked="" type="checkbox"/> A preliminary amendment (10 pages) 14. <input checked="" type="checkbox"/> An Application Data Sheet under 37 CFR 1.76. 15. <input type="checkbox"/> A substitute specification. 16. <input type="checkbox"/> A power of attorney and/or change of address letter. 17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 – 1.825. 18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4). 19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).		

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. APPLICATION NO. 10/562086 <small>(known as the "Serial") (see 37 CFR 1.53)</small>		INTERNATIONAL APPLICATION NO. PCT/US2004/021637		ATTORNEY'S DOCKET NUMBER 59441(11259)	
20. <input checked="" type="checkbox"/> Other items or information: Figures 1-6 (4 sheets); Copy of Published PCT Application WO 2005/003321 A2; Copies of PCT/RO/101 & Fee sheet, Form PCT/RO/102, Form PCT/RO/105, Form PCT/ISA/202, Form PCT/IB/301, Form PCT/IB/304, Form PCT/IB/308, & Form PCT/IB/311; Copy of Transmittal of PCT Power of Attorney (6 pages); Copy of Transmittal of Recordation Form and Assignment (6 pages); Declaration and Power of Attorney (4 pages); Return Receipt Postcard					
The following fees have been submitted				CALCULATIONS	PTO USE ONLY
21. <input checked="" type="checkbox"/> Basic national fee (37 CFR 1.492(a)) \$300				\$ 150.00	
22. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) \$0 All other situations \$200				\$ 200.00	
23. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) \$0 Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority \$100 International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB \$400 All other situations \$500				\$ 100.00	
TOTAL OF 21, 22 and 23 =				\$ 450.00	
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE		
22 - 100 =	/50 =		x \$250.00	\$	
Surcharge of \$130 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).				\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	28 - 20 =	8	x 25.00	200.00	
Independent claims	2 - 3 =		x	0.00	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ 360.00	360.00	
TOTAL OF ABOVE CALCULATIONS =				\$ 1,010.00	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.					
SUBTOTAL =				\$ 1,010.00	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).				\$	
TOTAL NATIONAL FEE =				\$ 1,010.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				\$	
TOTAL FEES ENCLOSED =				\$ 1,010.00	
				Amount to be refunded:	\$
				Amount to be charged	\$

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

- a. ☐ A check in the amount of \$ _____ to cover the above fees is enclosed.
- b. ☒ Please charge my Deposit Account No. 04-1105 in the amount of \$ 1,010.00 to cover the above fees.
A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 04-1105. A duplicate copy of this sheet is enclosed.
- d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038

NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

December 23, 2005

SEND ALL CORRESPONDENCE TO:

David G. Conlin
EDWARDS ANGELL PALMER & DODGE LLP
P.O. Box 55874
Boston, Massachusetts 02205
(617) 439-4444

Kathryn A. Piffat, Ph.D.
SIGNATURE

Kathryn A. Piffat, Ph.D.
NAME

CUSTOMER NUMBER: 21874

34,901
REGISTRATION NUMBER

Application No. (if known): Not Yet Assigned

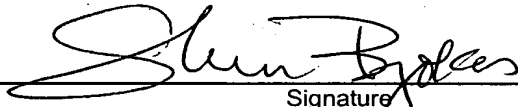
Attorney Docket No.: 59441(11259)

Certificate of Express Mailing Under 37 CFR 1.10

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Airbill No. EV 754 867 946 US in an envelope addressed to:

MS PCT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

on 23 December 2005
Date



Signature

Sharon Bizokas

Typed or printed name of person signing Certificate

Registration Number, if applicable

(617) 439-4444
Telephone Number

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

Fee Transmittal (1 page);
Transmittal Letter to the United States Designated-Elected Office (3 pages);
Specification including claims & abstract (18 pages); Figures 1-6 (4 sheets);
Copy of of Published PCT Application No. WO 2005/003321 A2;
Copies of PCT/RO/101 & Fee sheet, Form PCT/RO/102, Form PCT/RO/105, Form PCT/ISA/202,
Form PCT/IB/301,
Form PCT/IB/304, Form PCT/IB/308, & Form PCT/IB/311;
Copy of Transmittal of PCT Power of Attorney (6 pages);
Copy of Transmittal of Recordation Form and Assignment (6 pages);
Declaration and Power of Attorney (4 pages);
Preliminary Amendment (10pages); and
Return Receipt Postcard.
Charge \$1,010.00 to deposit account 04-1105

Under the Paperwork Reduction Act of 1995, no person are required to respond to a collection of information unless it displays a valid OMB control number.

Effective on 12/08/2004. Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818). FEE TRANSMITTAL For FY 2005		Complete if Known Application Number 10/562086 Filing Date July 6, 2004 First Named Inventor Peter J. Quesenberry Examiner Name Not Yet Assigned Art Unit N/A Attorney Docket No. 59441(11259)	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27			
TOTAL AMOUNT OF PAYMENT	(\$)	1,010.00	

METHOD OF PAYMENT (check all that apply)	
<input type="checkbox"/> Check <input type="checkbox"/> Credit Card <input type="checkbox"/> Money Order <input type="checkbox"/> None <input type="checkbox"/> Other (please identify): _____	
<input checked="" type="checkbox"/> Deposit Account Deposit Account Number: 04-1105 Deposit Account Name: Edwards Angell Palmer & Dodge LLP	
For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)	
<input checked="" type="checkbox"/> Charge fee(s) indicated below <input type="checkbox"/> Charge fee(s) indicated below, except for the filing fee	
<input checked="" type="checkbox"/> Charge any additional fee(s) or underpayment of fee(s) under 37 CFR 1.16 and 1.17 <input checked="" type="checkbox"/> Credit any overpayments	

FEE CALCULATION								
1. BASIC FILING, SEARCH, AND EXAMINATION FEES								
Application Type	Fee (\$)	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
		Small Entity	Fee (\$)	Small Entity	Fee (\$)	Small Entity	Fee (\$)	
Utility	300	150	500	250	200	100		
Design	200	100	100	50	130	65		
Plant	200	100	300	150	160	80		
Reissue	300	150	500	250	600	300		
Provisional	200	100	0	0	0	0		
2. EXCESS CLAIM FEES								
Fee Description	Fee (\$)	Small Entity	Fee (\$)					
Each claim over 20 (including Reissues)	50	25						
Each independent claim over 3 (including Reissues)	200	100						
Multiple dependent claims	360	180						
Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)	Multiple Dependent Claims				
28	- 20 = 8	x	200.00	Fee (\$) Fee Paid (\$)				
Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)					
2	- 3 =	x						
3. APPLICATION SIZE FEE								
If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).								
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)				
22	- 100 =	/50	(round up to a whole number) x					
4. OTHER FEE(S)								
Non-English Specification, \$130 fee (no small entity discount)				Fees Paid (\$)				
Other (e.g., late filing surcharge):								
1631 Basic National Stage fee				150.00				
1633 National Stage Examination Fee - all other ...				200.00				
1641 National Stage Search Fee - U.S. was the ISA				100.00				
1615 National Stage claims - extra total (over twenty)				200.00				
1616 National Stage claims - multiple dependent				360.00				

SUBMITTED BY			
Signature	<i>Kathryn A. Piffat, Ph.D.</i>	Registration No. (Attorney/Agent)	34,901
Name (Print/Type)	Kathryn A. Piffat, Ph.D.	Telephone	(617) 439-4444
		Date	December 23, 2005
I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV 754 867 946 US, in an envelope addressed to: MS PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below. Dated: December 23, 2005 Signature: <i>Sharon Bizokas</i> (Sharon Bizokas)			

IAP20 Rec'd PCT/PTO 23 DEC 2005

PTO/SB/21 (09-04)

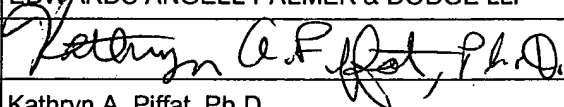
Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<h1 style="text-align: center;">TRANSMITTAL FORM</h1> <p style="text-align: center;">(to be used for all correspondence after initial filing)</p>		Application Number	US04/21637 2005/062086
		Filing Date	July 6, 2004
		First Named Inventor	Peter J. Quesenberry
		Art Unit	N/A
		Examiner Name	Not Yet Assigned
Total Number of Pages in This Submission		Attorney Docket Number	59441WO(11259)

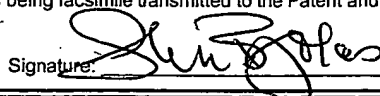
ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): PCT Power of Attorney (2 pages)
Remarks		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name	EDWARDS ANGELL PALMER & DODGE LLP		
Signature			
Printed name	Kathryn A. Piffat, Ph.D.		
Date	November 4, 2005	Reg. No.	34,901

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office, facsimile no. (571) 273-8300, on the date shown below.

Dated: November 4, 2005

Signature:



(Sharon Bizokas)

FAX TRANSMISSION

DATE: November 4, 2005

PTO IDENTIFIER: Application Number US04/21637
Patent Number

Inventor: Peter J. Quesenberry

MESSAGE TO: US Patent and Trademark Office

FAX NUMBER: (571) 273-8300

FROM: EDWARDS ANGELL PALMER & DODGE LLP

David G. Conlin

PHONE: (617) 439-4444

Attorney Dkt. #: 59441WO(11259)

PAGES (Including Cover Sheet): 4

CONTENTS: Transmittal (1 page)
PCT Power of Attorney (2 pages)
Certificate of Transmission (1 page)

If your receipt of this transmission is in error, please notify this firm immediately by collect call to sender at (617) 439-4444 and send the original transmission to us by return mail at the address below.

This transmission is intended for the sole use of the individual and entity to whom it is addressed, and may contain information that is privileged, confidential and exempt from disclosure under applicable law. You are hereby notified that any dissemination, distribution or duplication of this transmission by someone other than the intended addressee or its designated agent is strictly prohibited.

EDWARDS ANGELL PALMER & DODGE LLP
P.O. Box 55874, Boston, Massachusetts 02205
Telephone: (617) 439-4444 Facsimile: (617) 439-4170

TRANSACTION REPORT

P. 01

NOV-04-2005 FRI 04:02 PM

DATE	START	RECEIVER	TX TIME(L)	PAGES	TYPE	NOTE	M#	DP
NOV-04	04:00 PM	215712738300	1' 33" (1)	5	SEND	010/562088		

TOTAL : 1M 33S PAGES: 5

IAP20 Rec'd PCT/PTO 23 DEC 2005

FAX TRANSMISSION

DATE: November 4, 2005

PTO IDENTIFIER: Application Number US04/21637
Patent Number

Inventor: Peter J. Quesenberry

MESSAGE TO: US Patent and Trademark Office

FAX NUMBER: (571) 273-8300

FROM: EDWARDS ANGELL PALMER & DODGE LLP
David G. Conlin

PHONE: (617) 439-4444

Attorney Dkt. #: 59441WO(11259)

PAGES (Including Cover Sheet): 4

CONTENTS: Transmittal (1 page)
PCT Power of Attorney (2 pages)
Certificate of Transmission (1 page)

10/562086

IAP20 Rec'd PCT/PTO 23 DEC 2005

PTO/SB/97 (09-04)
Approved for use through 07/31/2006. OMB 0651-0031

U. S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

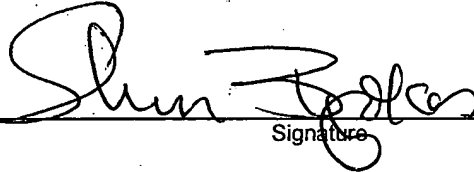
Application No. (if known): US04/21637

Attorney Docket No.: 59441WO(11259)

Certificate of Transmission under 37 CFR 1.8

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office.

on November 4, 2005
Date



Signature

Sharon Bizokas

Typed or printed name of person signing Certificate

Registration Number, if applicable

(617) 439-4444

Telephone Number

Note: Each paper must have its own certificate of transmission, or this certificate must identify each submitted paper.

Transmittal (1 page)

PCT Power of Attorney (2 pages)

TRANSACTION REPORT

10/562086 01

NOV-04-2005 FRI 04:05 PM

DATE	START	RECEIVER	TX TIME(L)	PAGES	TYPE	NOTE	#	DP
NOV-04	04:03 PM	217033065995	1' 54" (1)	5	SEND	OK	279	

TOTAL : 1M 54S PAGES: 5

FAX TRANSMISSION

DATE: November 4, 2005

PTO IDENTIFIER: Application Number US04/21637
Patent Number

Inventor: Peter J. Quesenberry

MESSAGE TO: USPTO PTAS System

FAX NUMBER: (703) 306-5995

FROM: EDWARDS ANGELL PALMER & DODGE LLP
Kathryn A. Piffat, Ph.D.

PHONE: (617) 439-4444

Attorney Dkt. #: 59441WO(11259)

PAGES (Including Cover Sheet): 5

CONTENTS: Recordation Form Cover Sheet (1 page)
Assignment (2 pages)
Charge \$40.00 to deposit account 04-1105
Certificate of Transmission (1 page)

10/562086

IAP20 Rec'd PCT/PTO 23 DEC 2005

Approved for use through 07/31/2006. OMB 0651-0031
U. S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

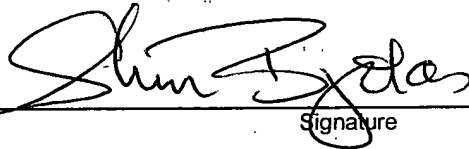
Application No. (if known): US04/21637

Attorney Docket No.: 59441WO(11259)

Certificate of Transmission under 37 CFR 1.8

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office.

on November 4, 2005
Date



Signature

Sharon Bizokas

Typed or printed name of person signing Certificate

Registration Number, if applicable

(617) 439-4444

Telephone Number

Note: Each paper must have its own certificate of transmission, or this certificate must identify each submitted paper.

Recordation Form Cover Sheet (1 page)
Assignment (2 pages)
Charge \$40.00 to deposit account 04-1105

IAP20 Rec'd PCT/PTO 23 DEC 2005

FAX TRANSMISSION**DATE:** November 4, 2005**PTO IDENTIFIER:** Application Number US04/21637

Patent Number

Inventor: Peter J. Quesenberry**MESSAGE TO:** USPTO PTAS System**FAX NUMBER:** (703) 306-5995**FROM:** EDWARDS ANGELL PALMER & DODGE LLP

Kathryn A. Piffat, Ph.D.

PHONE: (617) 439-4444**Attorney Dkt. #:** 59441WO(11259)**PAGES (Including Cover Sheet):** 5**CONTENTS:** Recordation Form Cover Sheet (1 page)
Assignment (2 pages)
Charge \$40.00 to deposit account 04-1105
Certificate of Transmission (1 page)

If your receipt of this transmission is in error, please notify this firm immediately by collect call to sender at (617) 439-4444 and send the original transmission to us by return mail at the address below.

This transmission is intended for the sole use of the individual and entity to whom it is addressed, and may contain information that is privileged, confidential and exempt from disclosure under applicable law. You are hereby notified that any dissemination, distribution or duplication of this transmission by someone other than the intended addressee or its designated agent is strictly prohibited.

EDWARDS ANGELL PALMER & DODGE LLP
P.O. Box 55874, Boston, Massachusetts 02205
Telephone: (617) 439-4444 Facsimile: (617) 439-4170